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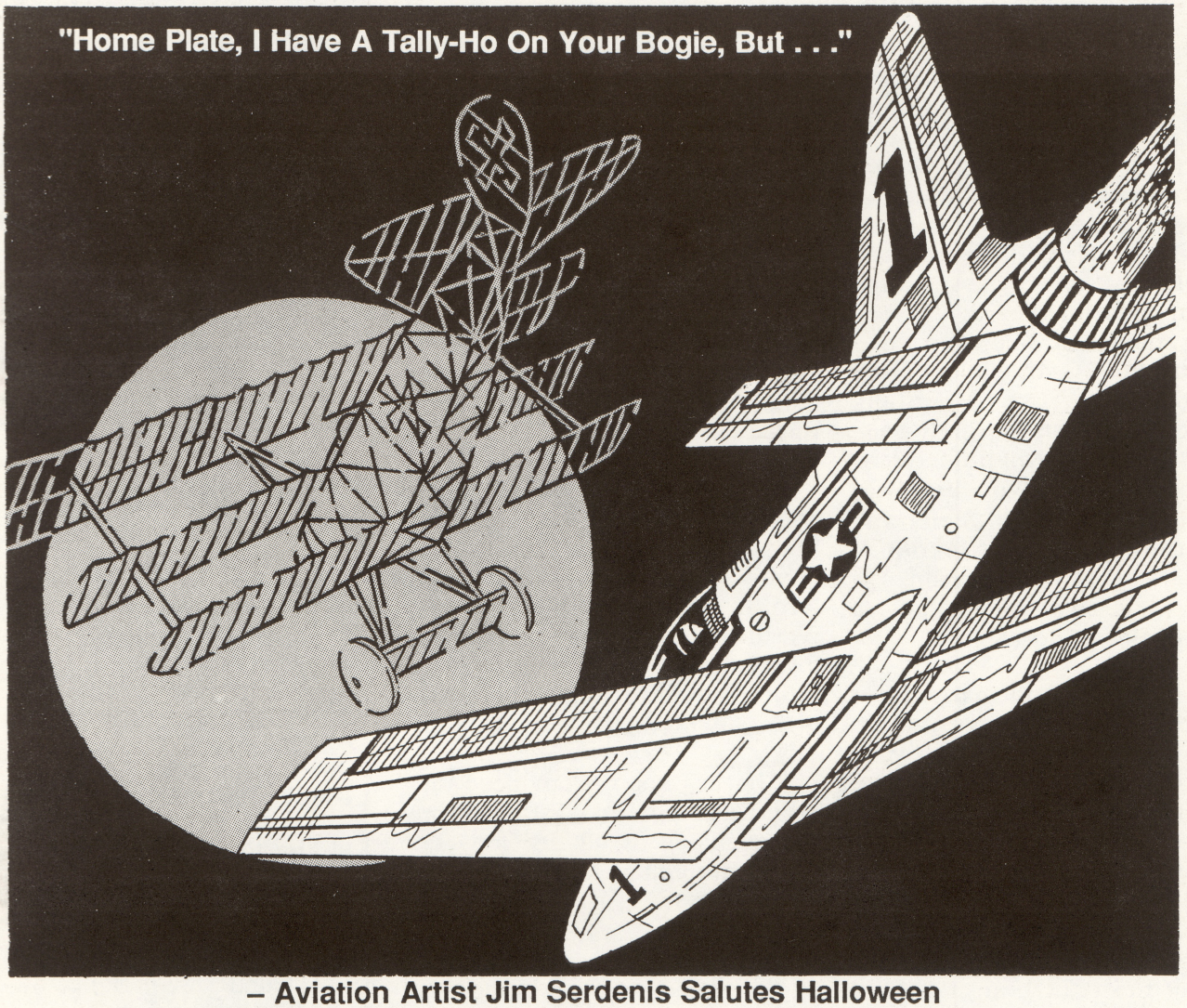
Yankee WINGS

THE MAGAZINE OF THE YANKEE AIR FORCE



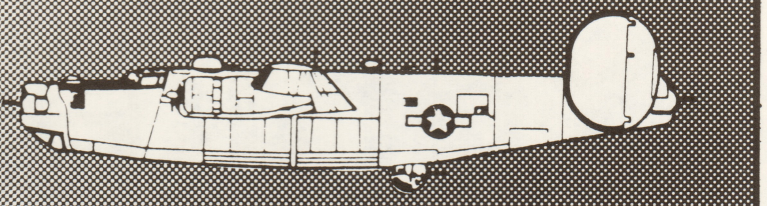
– Aviation Artist Jim Serdenis Salutes Halloween

Also in this issue . . .

- Airman of the Year
- Ford's Military Gliders
- The Montrose Ghost
- Tale Spins - The Tomcat
- Doolittle Memorial Plans

. . . and more!

Yankee WINGS



This month in *Yankee Wings*

by Jim Hanford

I think you will agree that this issue brings another "full plate" of aviation articles and organization news. Our 1988 Airman of the Year is probably best known for his accomplishments as an astronaut, but how well do you know John Glenn, *the aviator?* Next, Bob Pawley has written another informative article on aircraft made in Michigan, this time on the CG-4A glider "Built Ford-Tough" in Iron Mountain. We found some rarely-seen photos of the manufacturing processes in a WWII *Air Trails* magazine. Then, Jack Stankrauff covers the F-14 Tomcat. And as a reminder that Halloween is approaching, we offer one of aviation's oldest ghost stories.

You will also find many items of interest in the organization pages. Specifically, I direct your attention to the Board Report, since their actions will have far-reaching implications for every member. The last part of the article discusses our precarious financial situation, and it probably doesn't say enough. One result of the tight budget is that for the foreseeable future *Yankee Wings* will adopt a bi-monthly production schedule.

Some may wonder, "What can the individual member do to help solve the problem?" Among the ways individuals can help are the following: (1) recruiting new members, (2) supporting special events through the pre-sale of tickets and by encouraging the public and other members to attend, and (3) buying through the gift shop items you would have purchased elsewhere.

In this issue's membership report, Charlie Lingenfelter notes that the enlistment of **Allen Heil** as member number 3065 brings the total membership only to 1446. We seem to lose members almost as fast as they are signed up!

The things we must do to retain more members are probably too many to list here, but we have provided a membership form in this issue for your use in recruiting a new member. That form has two sides, and initially I didn't want to take the space necessary to run it.

Charlie soon convinced me otherwise. He noted that forms are available at all divisions but there are many members who aren't able to get them conveniently.

He also said something like, "Most everything is more fun if you can share it with someone." Each of us should take a few minutes to think what it is we enjoy most about the Yankee Air Force, and someone we know who would also enjoy it. If that person is not a member, why not give him or her the form and a few of the reasons you enjoy the YAF?

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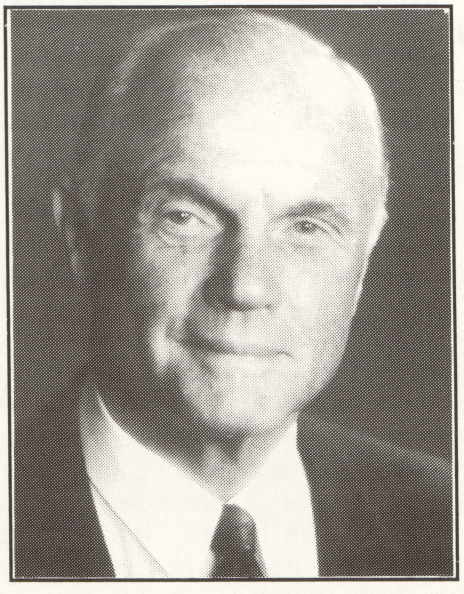
YAF National "Airman of the Year"

John H. Glenn, Jr.

First American to Orbit the World – 1962



John Herschel Glenn, Jr. was born in Camebridge, Ohio, on July 18, 1921, to John Herschel and Clara Sproat Glenn. In 1923, the Glenns moved to New Concord where Mr. Glenn opened a plumbing business. Young John, who was destined to become New Concord's most famous son, was never known by the name, "Junior". For some reason that no one remembers, he picked up the nickname "Bud" early in life and it stuck around his hometown.

Glenn's mother recalled that his attraction with aviation began while yet a pre-schooler. Whenever the family went to Columbus, they always made a slight detour to Port Columbus Airport so young John could see the airplanes.

By the time he'd reached high school, Bud Glenn had made two of life's biggest decisions – a career in aviation and the girl he would marry. She was Anna Castor, the daughter of Dr. and Mrs. Castor who lived just a few houses away. John and Annie were married on April 6, 1943, upon his commissioning in the U.S. Marine Corps.

While in high school, Glenn was sports editor on the school paper and played the male lead in the senior class play. He was the only athlete in the school to letter in three sports – football, basketball and tennis – and he learned to bake a professional-looking fudge cake in home economics class.

In the fall of 1939, Glenn enrolled as a science major in Muskingum College, only a few blocks from New Concord High School. His mother and her parents had attended Muskingum and Annie Castor was already enrolled as a music student. In college, Glenn played football as a substitute and place-kicker. During his sophomore year, he signed up for the Civilian Pilot Training Program at the New Philadelphia Airport.

Three months into his junior year, the Japanese attacked Pearl Harbor. Shortly after, John enlisted in the U.S. Naval Reserve V-5 Program as a seaman second-class. In May 1942, he was assigned to active duty and entered naval flight training. On March 31, 1943, he proudly received the gold wings of a Naval Aviator and the gold bars of a second lieutenant, USMC.

Glen served his entire WWII combat tour with Marine Observation Squadron 155 on Majuro Atoll in the Marshall Island group. VMO-155 flew the Chance Vought F4U Corsair against bypassed Japanese garrisons on neighboring islands. Although originally intended as a fighter, the F4U was employed as a fighter-bomber when no aerial opposition materialized. The pilots of VMO-155 experimented with various methods and ideas for delivering their ordnance more effectively. Many of the tactics they pioneered were used with great advantage later in the war.

Primarily, these experiments involved the determination of how much weight the F4U could carry and the best techniques for using the plane as a dive bomber. VMO-155 always made their dives with wheels down because they believed that the extra drag translated into slower speed. This allowed a lower release altitude which prompted better accuracy.

Another area of experimentation was the development and delivery of napalm fire bombs. Although napalm was first used in the Marianas in July 1944, there was still much to learn about the most effective type of bomb and the best tactics for its delivery.

Glenn completed his overseas tour in February 1945, having flown 59 missions. During the next four years, he served at several Marine Air Stations plus a tour flying the Corsair in China and Guam.

In the early '50s, John got checked out in jet aircraft. Promoted to major, he joined VMF-311 in Korea in February 1952 where he flew 63 fighter-bomber missions in the Grumman F9F Panther jet. Among the ground crews, it quickly became a given that Glenn would bring back an aircraft full of holes.

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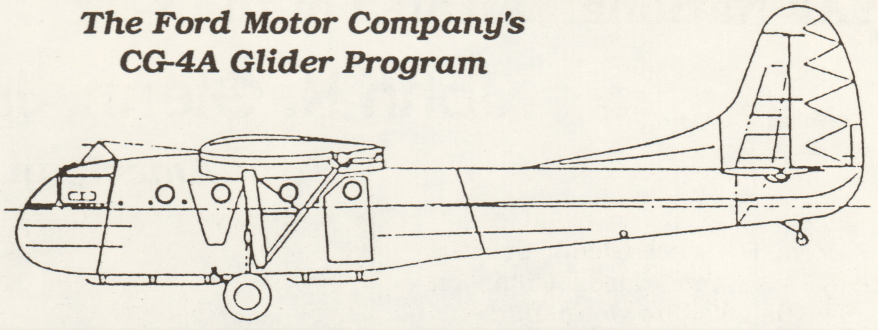
Michigan's Aviation Heritage

by ROBERT F. PAULEY

The Ford Motor Company's CG-4A Glider Program

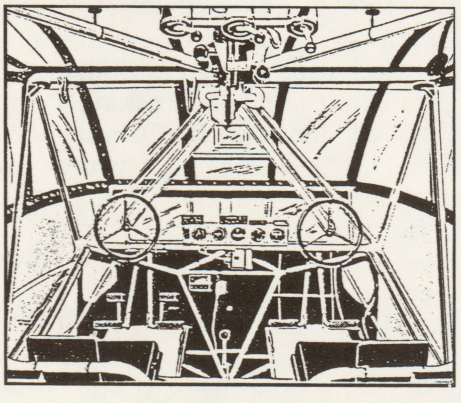


May of 1940 saw the introduction of a new form of aerial warfare with the first use of glider troops to gain a military objective. When Hitler attacked France, Holland and Belgium along the western front, the key to the defense of Belgium hinged upon Fort Eben Emael, a huge command post and network of artillery weapons overlooking a strategic area at the intersection of the Meuse River at the Albert Canal. The fort was a stronghold dominating the area and was considered by the Belgians to be impregnable from all forms of attack. Unfortunately they had not anticipated the use of airborne troops landing in gliders.

As dawn approached on the 10th of May, 1940, thirty nine German JU-52 transport planes, each towing a DFS 230 glider loaded with paratroops, their weapons and explosives, crossed the Belgium border. The gliders were released at 7,500 feet, and as dawn broke they descended silently across the countryside to land on the grassy parade grounds adjacent to the fort. Twenty-four hours later the fort had fallen, opening the attack routes into northern France for the German Army. The capture of Fort Eben Emael had been a stunning success, thanks to the use of the troop-carrying gliders.

A year later, in May 1941, the German glider troops were employed again during the invasion of Crete, a small island off the coast of Greece then under the control of a garrison of 42,000 British soldiers. This time a fleet of JU-52s, again towing DFS 230 gliders, flew 150 miles across the Aegean Sea to land on the rocky terrain. The glider troops succeeded quickly in capturing several strategic airfields, thus paving the way for a German victory.

The success of these German glider operations had caused much concern among the military leaders of the Allied Forces. Here in the United States, it became apparent that the German



CG-4A's Austere Cockpit

Air Force was well advanced over our efforts in the design and use of troop gliders. In fact, the U.S. Army Air Force had no troop-carrying gliders in its inventory at the time of these German glider operations. As a result, in February 1941, General Henry H. "Hap" Arnold, Chief of the Army Air Corps, directed that a study be initiated to develop a transport glider as a military weapon.

It must be remembered that during the formative years of the Luftwaffe in the early 1930s, its future military pilots had trained on gliders and sailplanes and as a result, the Germans were well versed in glider operations, techniques and design.

In this country, on the other hand, glider flying had been pursued and enjoyed by a select group of soaring enthusiasts only for sport and contest flying.

There was no military interest in unpowered aircraft. The successful attack on the Belgian fort, and General Arnold's directive, quickly changed that negative attitude towards gliders as a military weapon.

As a first step toward creating a glider corps, the Air Corps assigned twelve officers to a three-week course in glider training. This initial step rapidly grew into a large and separate glider pilot training program. The training was initially conducted in ex-civilian gliders that had been commandeered by the military.

Later, special training gliders were introduced, of which the Laister-Kauffman TG-4A was the most widely used. Although production TG-4A's were built in St. Louis, the prototype was a Michigan design known as the "Yankee Doodle." It had been designed and built in 1939 by the students at the Lawrence Institute of Technology, then located in Highland Park. By the end of World War II, over 6000 U.S. glider pilots had been trained in this program.

With the glider pilot training program well under way, the military was able to devote its energies toward the design of transport and cargo gliders. Several

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Michigan's Aviation Heritage

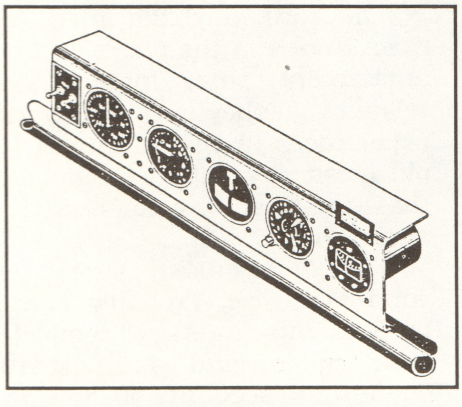
(Continued from Page 4)

dozen manufacturers, many without any previous glider design experience, had submitted proposals for a series of troop gliders.

One of the most successful designs was by the Waco Aircraft Company of Troy, Ohio. Waco had designed the CG-3A, a nine-seat troop glider. Approximately 100 were built. The CG-3A's were used for advanced training as the student pilots moved up to the larger and heavier cargo gliders.

By mid-1941, the Army Air Corps (redesignated the Army Air Force in 1941 to become an independent service) had decided that the CG-3A was too small to suit their needs. What they wanted was a larger glider, one capable of carrying 15 soldiers or a Jeep or a 75 mm howitzer and cargo. It had to be of simplified construction, easy to build and low cost.

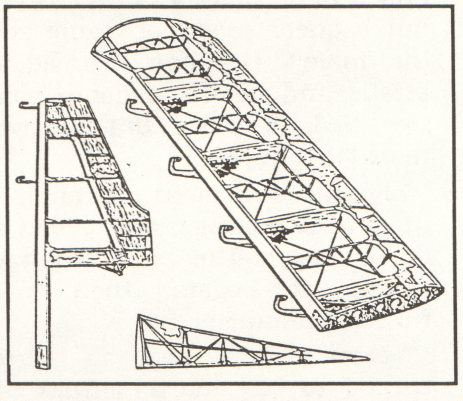
Waco's answer to these Air Force specifications was an ungainly design with a square cross-section fuselage that eventually received the designation



Simple Instrument Panel Has Five Instruments

CG-4. Designed by Francis Arcier, an English designer then working at Waco, it was first flown in early 1942 and met all of the Air Force requirements. Plans were quickly made to produce the CG-4A, as the production version was known, in large numbers. By the time the war came to a close, 12,393 of them had been built by 16 different manufacturers.

The CG-4A was a very large high wing cargo glider of conventional design. It had a wing span of 83 feet, 8 inches, a wing area of 852 square feet and was 48 feet long. Empty weight was 3700 pounds and the fully loaded weight with 15 soldiers on board was 7500 pounds. The normal towing speed was 125 mph and they were most often towed behind the ubiquitous C-47 cargo plane. The landing speed was in

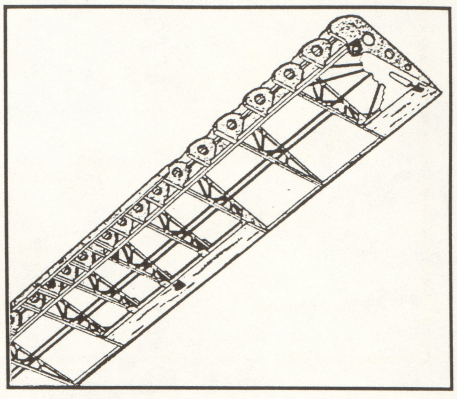


Stabilizer, Fin and Dorsal Fin Details

the range of 40 to 50 mph, and was usually a "controlled crash" landing in a combat zone. The CG-4A was of mixed construction with a welded steel tube fuselage and wooden wings. The entire airframe was fabric-covered. One of its unique features was the hinged forward cockpit section containing the side-by-side pilot and co-pilot seats. The entire nose could swing upward on a hinge, permitting direct loading of Jeeps or other vehicles into the cabin.

Large scale production of the CG-4A was planned soon after the first flight of the Waco-built prototype in early 1942. Ford Motor Company was approached in March 1942 and was asked to participate in the program.

By April 21, 1942 Ford had signed a contract to build the CG-4A. After obtaining a complete set



Aileron Structure Details

of drawings from Waco, the Ford engineers decided to re-draw all of the drawings to Ford standards. During this process, many errors were uncovered and had to be resolved before production could start.

Ford introduced numerous cost-cutting techniques and production tooling methods that enabled Ford to produce finished gliders at a peak rate of 200 per month. A humidifying system was installed in the plant to maintain the correct humidity and temperature and to ensure the correct moisture content in the wood. Also, a quick-dry gluing procedure was introduced that applied heat and pressure to reduce glue drying time.

The Ford CG-4A gliders were built in Michigan's upper peninsula at the Ford Iron Mountain plant. This complex had been developed in the 1920s, specializing in wood parts for Ford Model Ts. It later built station wagon bodies.

Although closed before the outbreak of WWII, the plant was reopened because it was an ideal site to build the gliders which used a large percentage of wood in their construction.

The welded steel tube fuselages were built in Menominee by the Lloyd Manufacturing Company but all of the wood work and the final assembly of the

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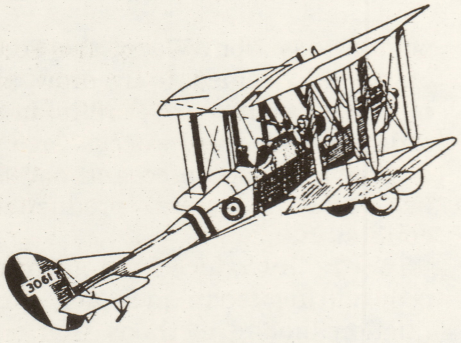

The Montrose Ghost

Who Haunted the World War I Aerodrome – and Why?

The oldest and most widely believed ghost story in aviation takes its name from Montrose Field in Scotland. The home of No. 2 Squadron before World War I, it had become a training field occupied by No. 18 (Reserve) Squadron by 1916. Located on a bleak, windy spot near the North Sea, it had grown as a result of the wartime expansion and included a grand new officers' mess.

The instructors, however, did not live there with the "Huns" (as the pupils were called because, it was alleged, they destroyed more British airplanes than the Germans could), but in the old mess which had been used by No. 2 Squadron.

One day in the autumn of 1916, Major Cyril Foggin, a senior instructor, was walking toward his quarters in the old mess building. Through the dim air he saw at the door of his quarters a man in flying kit. Thinking he was a friend, he hailed him. There was no answer, but a queer sensation came over the major. His hair seemed to bristle and he felt a damp cold. He tried to move but he was rooted to the spot.

Foggin swallowed, summoned up a little courage, and yelled at the stranger. The unknown man looked at Foggin, then half-turned and vanished.

Later that evening as he returned to his quarters from the old mess hall, Foggin saw the same man. This time he would take no nonsense. He walked briskly toward the stranger, who entered the building. Foggin ran after him but once inside the room, he saw no one.

As he stood there wondering, he recalled that he himself had opened the door. He then sat down and indulged in a good session of worrying. Partly out of fear of ridicule, and partly because he did not trade in scare rumors, he decided to tell no one.

An uneasy atmosphere began to settle over the instructors' mess because others began to see things that weren't there. One instructor awoke in the middle of the night with the feeling that someone was in his room. By the dim light of the fire he saw a man sitting in a chair. He asked the stranger who he was and what he wanted, but there was no reply. As the instructor leaned forward to get a better look at the man's face, he vanished.

Another instructor, a Major Scott, was alone one evening when he saw a man in flying kit walk down the corridor and open the door of the C.O.'s office. Scott followed, but he found no one. He then summoned the sergeant of the guard, and the two searched the entire building but found no trace of the intruder. For reasons similar to Foggin's, neither man reported his experience.

One night Foggin was obliged to share his quarters with a naval aviator who had unexpectedly dropped in at Montrose. Sometime in the night the instructor woke to find a man in uniform sitting at the end of his bed. Foggin sat straight up and yelled, "What are you doing there?" The man vanished.

He was then aware that his roommate also was sitting up. "Did you see anything?" both officers asked simultaneously. The naval officer had also seen the visitor, and both men leaped out of bed to open the door where the man had vanished. There was no one there.

The next day the men told their stories in the mess. To their amazement, three more officers related that they had had strange experiences in the vicinity of the old mess. Soon it was concluded that at least five officers had seen a ghost.

The story quickly spread beyond Montrose. Probably carried by students as they completed their training and were posted to squadrons, accounts of the Ghost of Montrose went around the entire Royal Flying Corps at home and abroad.

Many suggestions were offered concerning the ghost's identity. One which gained favor was that it was a "Hun" who was told by his instructor that he was ready to solo. The student pro-

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THE MONTROSE GHOST

(Continued from Page 6)

tested that he did not feel confident enough, but the instructor insisted. The fellow took off and crashed, killing himself.

There had been much criticism in the newspapers about pilots being sent into combat with too little training to have a real chance of survival. This theory received support because the unfortunate pupil was haunting the instructors' quarters. Some felt that his attempt to enter the C.O.'s office was an effort to get his flying log book.

Of course, as the story spread it was retold in any number of ways, depending on the nature of the one telling the tale or his perception of the mood of his audience. Among the few who took it seriously was Mr. C. G. Grey, the hard-nosed editor of a weekly technical magazine, *The Aeroplane.* Grey discussed the matter with the chief witnesses and presented his "case" in a 1920 issue of *The Aeroplane.*

The explanation, Grey wrote, was not to be found at Montrose but in London. There, in the spring of 1916, Mr. Pemberton Billing, an air-minded politician, had stood in Parliament and accused some person unknown with "the murder of a certain Lieutenant Desmond Arthur."

Arthur had earned his Royal Aero Club certificate on June 18, 1912, and the following year was serving in No. 2 Squadron at Montrose. According to reports of his C.O. and fellow pilots, Arthur was an excellent flyer. He met his death on May 27, 1913, when the BE.2 biplane he was test-flying folded up at 2,500 feet. Arthur had throttled back the engine and was descending in a gentle turn when the starboard top wing collapsed, throwing the craft into a series of violent gyrations. His seatbelt gave way, and Arthur was thrown clear. Horrified observers below watched the pilot's body fall away, arms and legs flailing, until it struck the ground. There were no parachutes in 1913.

Arthur's friends, including C. G. Grey, were further incensed when the Royal Aero Club's Accidents Investigation Committee reported the cause of the wing failure as a faulty repair. Not only had the repair been incorrectly made but it was also not reported and had been concealed by a new piece of fabric. There was no conclusive evidence to identify the perpetrator, because the aircraft had been rebuilt by the Royal Aircraft Factory at Farnborough and then stationed at Jersey Brow before being flown to Montrose.

Enter Pemberton Billing and his demand for a judicial inquiry into the cause of the tragedy and the blame for it. The War Office had opened its own investigation in 1913, but with the onset of war it was never closed.

Now they undertook a strategy of proving Pemberton Billing a liar. They set up a semi-captive committee that issued its interim report in August, 1916. Among other things, the report denied the very existence of any unauthorized or faulty repair. In other words, Arthur had caused his own death by his reckless flying.

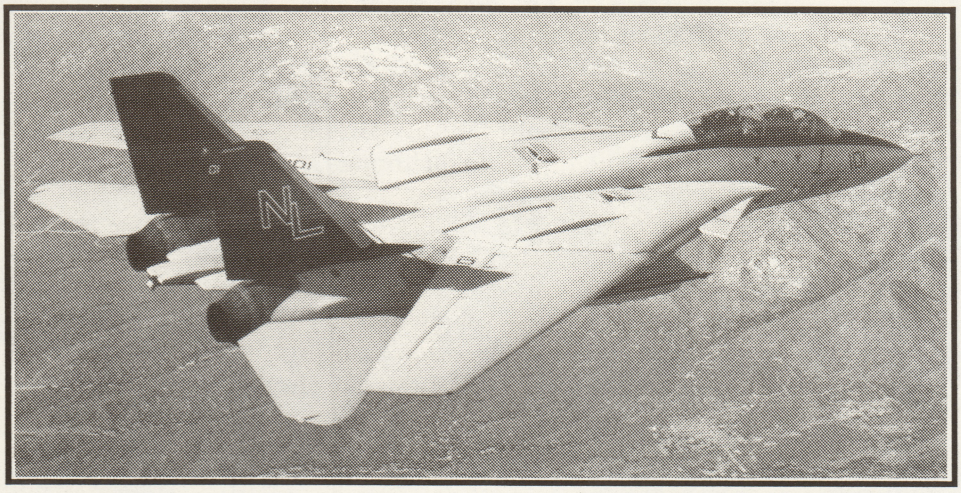
The argument C. G. Grey used to establish that the apparition was the ghost of Lt. Arthur hinged on the reason Arthur waited so long to haunt his old mess at Montrose. Grey concluded that, while someone's willful negligence had killed the flyer in 1913, people acting for the government in 1916 had officially and untruthfully sought to blame him, thereby staining his personal honor.

And yet the hauntings did not begin immediately after the release of the interim report, but in the autumn when the committee was drafting its final report. Only then did the ghost of Lt. Arthur seek the help of his friends.

In any event, two members of the War Office committee learned of the existence of the Royal Aero Club's report and insisted on appending it to the final report of their committee. With the final report's conclusions refuted by the addendum, Desmond Arthur could rest in peace.

The report was released on December 23. On Christmas night, the ghost appeared to two officers in the old mess and seemed to be smiling. Early in January 1917, he appeared for the last time to indicate to his comrades, it was said, that the affair was ended to his satisfaction.

There have been no more reported sightings of a ghost at Montrose. However, the story has since been rewritten as fiction and given a more dramatic ending. In this version, a pilot accepts a passenger at Montrose in 1963. After taking off, he sights the 1913-vintage BE.2 flying alongside. As he watches, the wing collapses and Desmond Arthur is thrown clear with an awful shriek. When the pilot turns to see if his passenger saw it, he discovers that he is alone in the aircraft. Although this makes for a "scarier" ghost story, it would seem to distract from C. G. Grey's version.



Grumman F-14 Tomcat

Tale Spins . . .

The Ultimate Weapons System?

by Jack B. Stankrauff

Combining superior aerodynamic capabilities, Mach 2-plus speed and a high-state electronics fire control system, the carrier-based Grumman F-14 Tomcat is the United States Navy's first-team fighter.

Born from F-111's Failures

General Dynamics' F-111 was scheduled to be used by all services during the 1960s, but it proved to be unsuitable for Navy carrier operations. It was too heavy (dangerously stretching arresting gear to the breaking point), lacked maneuverability and had poor pilot visibility. In July 1968, the Navy sent requests for fighter designs to aircraft manufacturers. Grumman had learned from the F-111 experience, and from its drawing boards came the Model 303 on January 15, 1969. During the following month a contract was signed, and the Tomcat was born. Not only was it the Navy's first carrier-based swing wing aircraft, but it used more titanium in its construction than any other aircraft. The titanium was welded with the new electron welding process. Furthermore, the Tomcat was the first to use the lightweight composite material, boron epoxy, in its construction.

Variable is "For the Birds!"

After all, swing or variable sweep wings have been used for thousands of years – by birds. The F-14 (sometimes called the "Turkey" due to its appearance) pilot can automatically (by computer) adjust the wings in to 68 degrees for Mach 2 flying or out to 20 degrees for slower stable flying. The Navy introduced the revolutionary fighter for fleet use on September 17, 1974. F-14s flew air cover for the Vietnam withdrawal the following year.

Technological Edge

The unequaled Hughes AWG-9 fire control system in its nose enables the F-14's NFO (Naval Flight Officer or "Back Seat Man") to detect airborne targets 100 miles away. This system can track 24 targets simultaneously, using a 120 mile-wide scan sector. Earlier fighter radar systems could track only one target at a time. After locking the radar onto the targets, the NFO can fire the Tomcat's six Phoenix long-range air-to-air missiles at six different targets. He can see all six targets and track them on his cockpit screen. After launch, each Phoenix homes in on the designated target using its on-board radar and self-contained navigation system. If a target changes course, the NFO sends steering commands to the Phoenix via a data link. During rigorous trials, the F-14 scored 84 per cent success with 100 Phoenix missiles fired. Little wonder that the Tomcat drivers' challenge for air combat is: "Anytime, baby!"

In addition to the Hughes system, the Tomcat's liquid-cooled electronic multi-functional capability (for the pilot as well as his NFO) includes electronic countermeasures, a data link to share vital combat information with intercept controllers, both airborne and aboard surface ships, inertial navigation, central navigation and other information processors, and the ALR-67 warning and recognition system.

Yet another outstanding electronic feature is the Northrup Television Camera Set (TCS). The TCS, steered by radar, presents a clear magnified image on the NFO's screen. Consequently, images may be positively identified at a range of over ten miles. TCS can prove vital when the Rules of Engagement require a number of Positive Identifications. Interestingly, the only fighter comparable to the F-14 weapons system is the Soviet MiG-31 Foxhound and its Amos missile.

Kill Capacity

Representing a great breakthrough in aircraft weaponry, the Tomcat can carry six Phoenix long-range air-to-air missiles (AAM), four Sparrow medium-range AAMs and four Sidewinder short-range AAMs. For close-in

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TALE SPINS . . .

(Continued from Page 8)

fighting, the Tomcat has an M-61A1 Vulcan 20-mm. cannon with a 675-round capacity. As impressive as the F-14's dog-fighting weapons are, it also can carry up to 14,500 lbs. of bombs – 14 MK-82 bombs or eight MK-83 bombs or four MK-84 bombs. Its complement of missiles and bombs can be carried with external fuel tanks and this assortment can be mixed as required by the mission.

Top of the Line

The F-14 is powered by two Pratt & Whitney TF30-P-412 turbofans rated at 20,900 lbs. thrust each. Each engine is designed to give 34 per cent more thrust for five per cent less fuel, cut time to height by 61 per cent and use 50 per cent less intercept fuel. The Tomcat's internal fuel capacity is 16,445 lbs. Fuel is carried between the engines so in case of battle damage, the fuel would not drain into the engines. Maximum design speed is Mach 2.34 (over 1,560 mph) with a landing speed of 130 knots. The Tomcat can remain on station for one hour, 500 miles from its carrier, while carrying an ordnance load of 5,000 lbs. The aircraft's maximum combat radius is 578 miles and its service ceiling is above 50,000 feet. External dimensions are: wing span (maximum): 64 ft., 1.5 in.; wing span (overswept): 33 ft., 3.5 in.; overall length: 16 ft.; wing area: 565 sq. ft.; and wing sweep (total): 20 to 68 degrees. The F-14's maximum take-off weight is 62,260 lbs.

Flying the Tomcat

Carrier pilots are generous in their praise of the F-14 Tomcat. Its control characteristics, especially for carrier landings, are ". . . tight and responsive" afforded by two large vertical fins and rudders. Pilots and their NFOs also praise its canopy which allows excellent all-around vision. One pilot said it all: "The best pure air fighting machine ever."

F-14 vs. F-4

Extensive dog fighting tests between the Tomcat and Phantom were conducted when the former first entered production. The F-14 bested the F-4 in every category. The Tomcat advantage was attributed primarily to its afterburning turbofan engines, and its computer-programmed wings and maneuvering flaps which allow tighter turns.

Punch-Out Survival

In combat, no fighter is infallible – not even the Tomcat. When the pilot and NFO have to punch-out (bail-out), the MK-GRU7A ejection seat, using an explosive charge, represents the latest escape technology. The Tomcat bail-out sequence is as follows: after jettisoning the canopy, both Tomcat crewmen pull the firing handle of the ejection seat and pull down their face curtains. Leg restraints are tightened, personnel services (radio lines, etc.) are automatically disconnected, ECM (Electronic Countermeasures) and IFF (Identification, Friend or Foe) destruct systems are initialized and an oxygen bottle is actuated to enable the aviators to breathe during their parachute descent. The ejection seat is fired up and out of the aircraft. The pilot's seat is delayed 0.4 seconds to prevent a collision with the NFO. A barostat device monitors the air pressure and automatically begins the parachute opening sequence when the airman falls below 13,000 feet. A small drogue parachute opens, followed by two more secondary parachutes. Then the main canopy opens and the ejection seat falls away, allowing the crewman to float downward with his survival kit.

Target: Terrorism!

F-14s from the United States Navy aircraft carriers *America* and *Coral Sea* provided CAP (Combat Air Patrol) cover for the April 15, 1986 air raids on Libyan terrorist targets in Benghasi. While this was a highpoint for the Tomcat, it remains the Navy's primary fighter all over the globe today. Navy plans call for the F-14 Tomcat to serve as a front line carrier fighter until the year 2000. In fact, production is scheduled through the 1990s.

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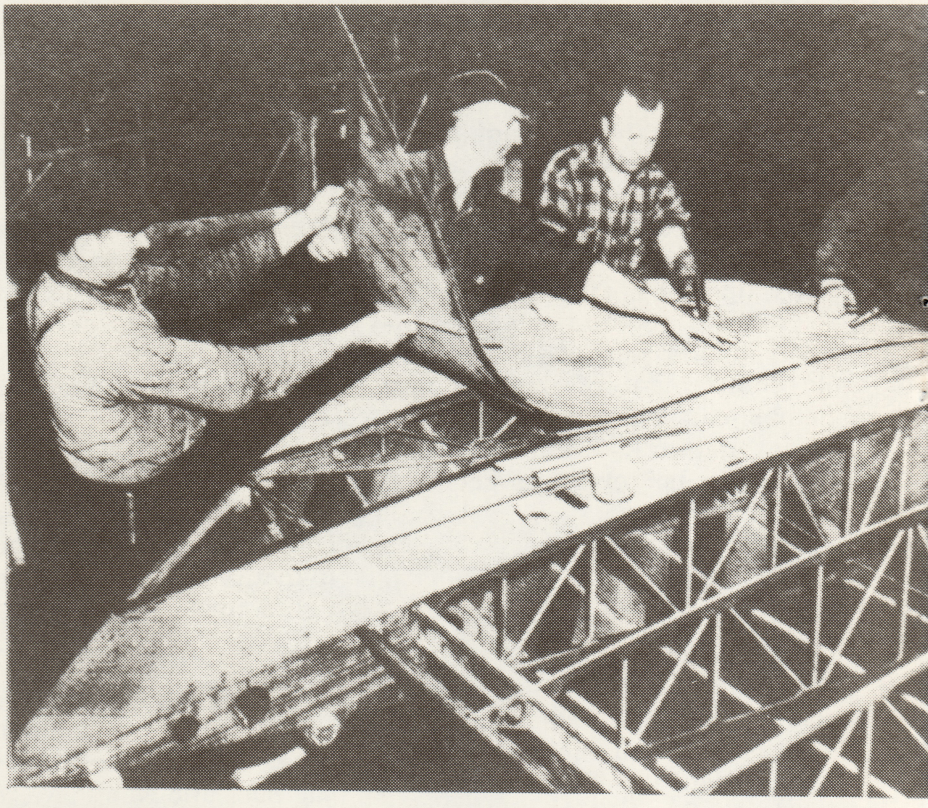
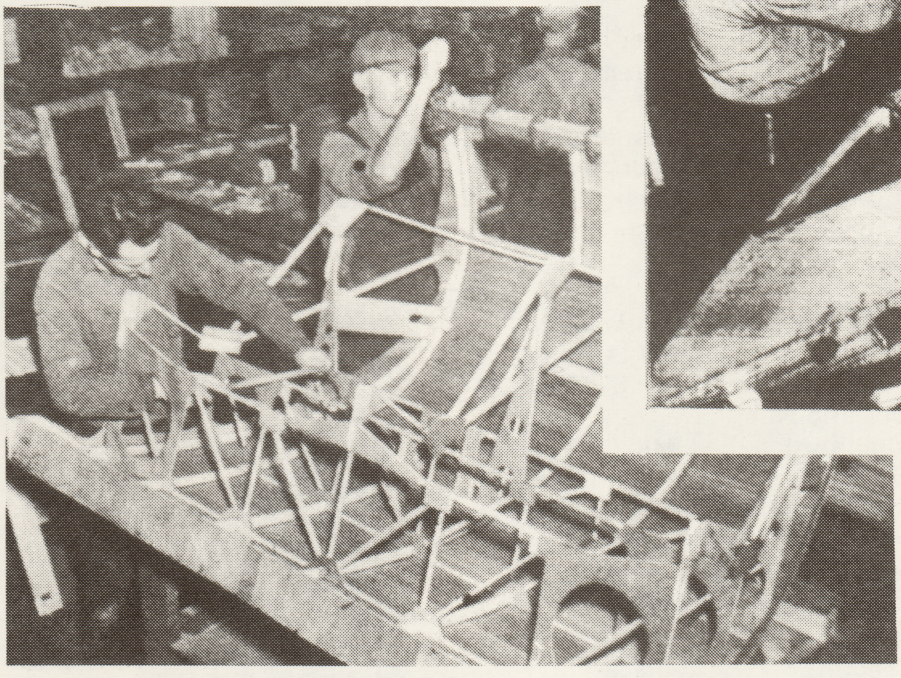
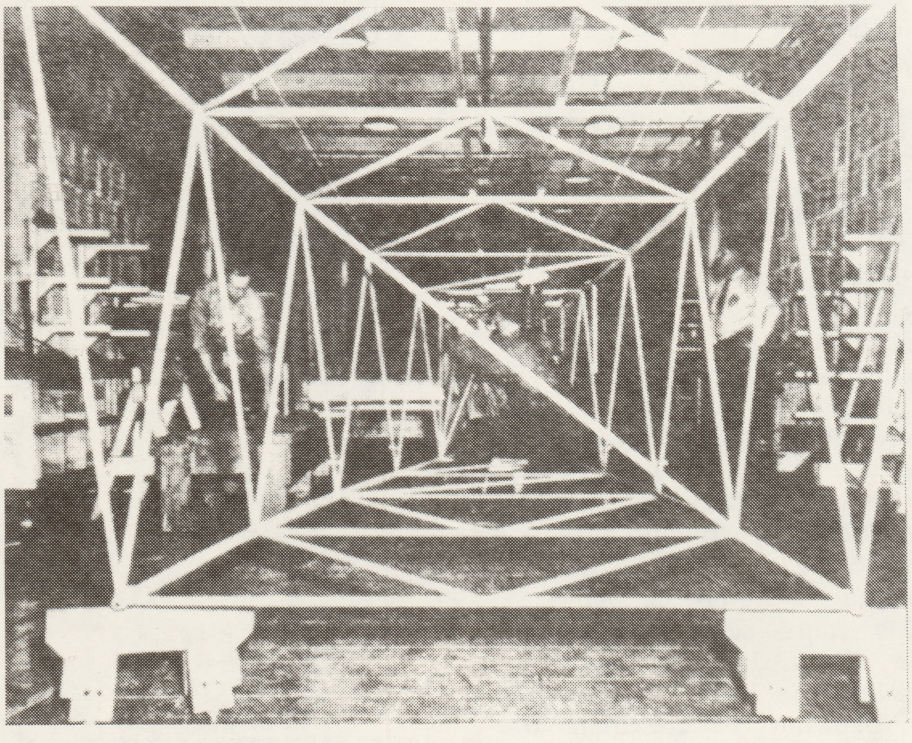
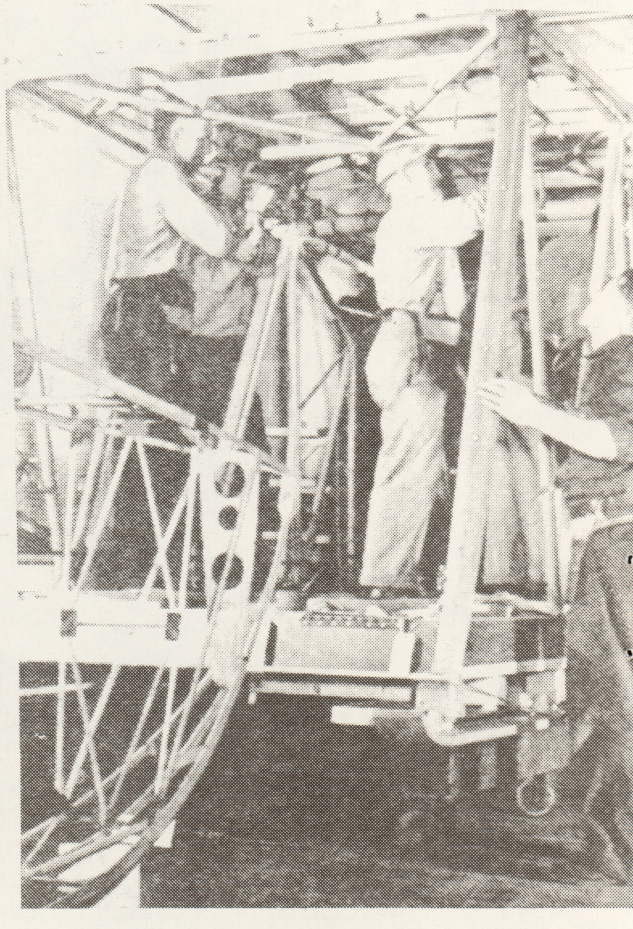
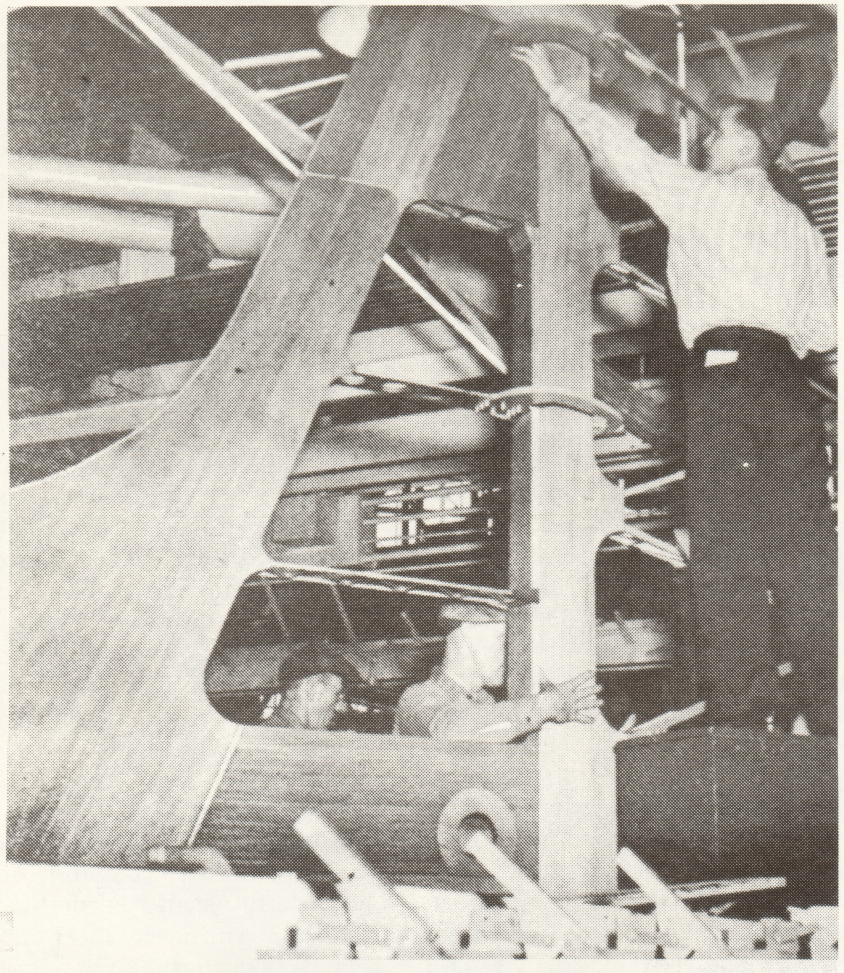
Building the CG-4A

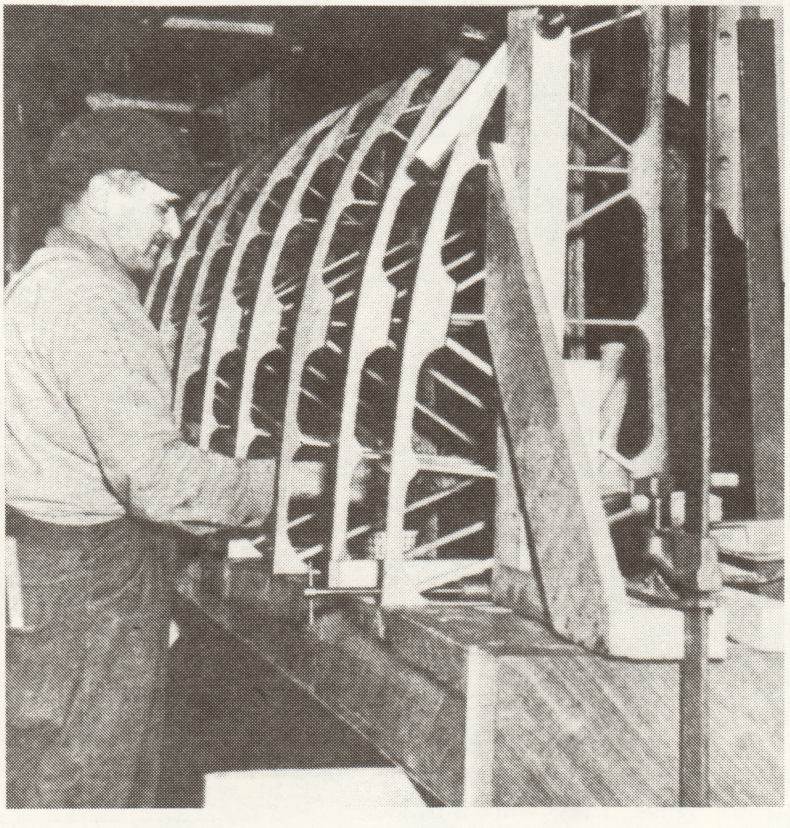












Restoration News

Pembroke: Painting of the insignia and markings is now in progress by Bill Force. The indian head on the nose is complete, as are the rondels on both sides of the fuselage and the national ID lettering. The wing markings and national flags remain to be done. Work continues on other systems as well. Marty Meyerhardt installed a new switch for the landing lights, and they are now fully functional. Dennis Golderer is making preparations for a gear retraction test. They have obtained the necessary jacks, and are refurbishing the pumps. Once they have determined everything that is needed and obtained the necessary parts, they will assemble them and complete the job.

Recently the flight crew taxied "Sir Percy" over to the compass rose and did a full speed static run-up at full throttle. All systems came through in great shape. On the return trip to the tie-down, a high speed check was made, and if it weren't for a few cool heads, "Sir Percy" might have been airborne on its first flight out of Essex County Airport. As it is, the Northeast Division does not have a scheduled date for the first flight, but it could be soon - *Bob Fenner, Project Leader, Northeast Division.*

L-2B: The L-2B flew 3.6 hours in June for pilot proficiency and the round trip to the Republic Airport Open House. Net revenues from L-2 operations during the April-June quarter totalled $83.43. A new turn-and-bank indicator has been installed and is working, but still needs some flight time for break-in and to loosen up. - *John Golderer, Director of Flight Operations, Northeast Division.*

(Continued on Page 15)

Airman of the Year – John H. Glenn, Jr.

(Continued from Page 3)

In June he finally received his long-awaited transfer to a fighter squadron, even if it was the U.S. Air Force's 25th Fighter-Interceptor Squadron as an exchange pilot. The 25th flew the F-86 Sabre jet where the action was – MIG Alley. But Glenn would fly many missions before he got a shot at a MIG – so many that he began to complain frequently about the lack of air opposition. One morning he was surprised to see on the nose of his aircraft, in foot-high letters of Marine Corps red and gold, the nickname, "MIG Mad Marine."

On July 12, 1953, John shot down his first MIG, chasing it down to 50 feet before he overshot and pulled up while the enemy exploded on the ground. Exactly one week later, he bagged another while he was leading his flight of four on a bounce of four MIGs. Then he discovered they were part of a well-spread-out group of 16. During the ensuing melee, Glenn's wingman developed engine trouble. As the two-plane element tried to disengage, they were repeatedly attacked by a half-dozen MIGs. When the last attacker flashed by, John got behind him and delivered a fatal burst. The MIG flew straight into a hillside. The remaining MIGs made seven runs on the Marine, who turned into each while his wingman made for home. When he finally ran out of ammunition, Glenn put the nose down and outran his pursuers. On July 22, Glenn and two others each claimed a MIG – the last three kills of the Korean War. In two wars, he earned a total of five Distinguished Flying Crosses and 19 Air Medals.

On July 9, 1954, after six months of instruction in all aspects of aircraft testing and evaluation, Bud Glenn graduated from the U.S. Navy Test Pilot School at Patuxent River, Maryland. During his subsequent two-year tour at "Pax River", he worked on several new aircraft, including the Chance Vought F7U Cutlass, the Douglas F4D-1 Skyray, and his "dream plane" – the Chance Vought F8U-1 Crusader.

In November 1956, Glenn was transferred to the Fighter Design Branch of the Navy's Bureau of Aeronautics. In this assignment, he conceived the idea for an attempt at the non-stop coast-to-coast record, using the F8U. It would be more than a PR stunt, however, for it would provide valuable knowledge about engine and airframe durability under sustained high-speed flight conditions.

John intended that he would be the pilot and christened the operation, "Project Bullet". Theoretically, if a .45-calibre bullet were fired from San Diego toward New York at the same time he took off, and if the bullet could maintain its muzzle velocity over that distance, an F8U could outfly the projectile by over 150 mph.

The project involved extensive preparations that included three aerial refuellings, something Glenn had never done. On July 16, 1957, he took off from NAS Los Alamitos and landed 3 hours and 23 minutes later at NAS Floyd Bennett Field on Long Island. At an average speed of 723 mph – well above the 670

(Continued on Page 13)

Michigan's Aviation Heritage

(Continued from Page 5)

gliders was done at the Ford plant.

Between September 1942 and August 13, 1945, Ford produced 4190 of the CG-4A gliders. Peak production was reached during the early months of 1945 when over 200 were produced each month.

The Air Force was so pleased with Ford's workmanship and high volume production that in 1944 they awarded Ford a contract for a new and larger glider. This was the CG-13A, a 42-seat version of the CG-4A.

Ford built a prototype XCG-13 in Dearborn and it was test flown at the Ford Airport (now the Ford test track). The production airplane, known as the CG-13A, also was built at the Iron Mountain plant. Before the contract was cancelled in December 1944, 97 units were built.

The gliders produced by Ford and the other manufacturers of the CG-4A were used with great success in the invasion of Sicily in July 1943, and in the D-Day landing in France on June 6, 1944. They were also used in landings in southern France, during the crossing of the Rhine River into Germany, and in Burma, where they were landed in jungle clearings at night 150 miles behind the Japanese lines.

Ford was not the only Michigan manufacturer to build these gliders during World War II. The Gibson Refrigerator Company, in Greenvile, produced 1078 CG-4A for a total production of 5366 cargo gliders built in our state by Ford and Gibson during the war.

ATTENTION

Yankee Air Force Headquarters is authorized to accept MASTERCARD and VISA charges. Current members and new applicants can now submit their charge number, expiration date and signature on the renewal form or new member application form for payment.

mph speed of sound in air – he had bettered the old mark by 21 minutes. (On his epic orbital flight, he covered a similar distance in just eight minutes.)

With the establishment of Project Mercury on October 5, 1958, NASA was tasked with the selection of the nation's first group of astronauts. The selection criteria specified that the field would be limited to military test pilots with over 1,500 hours and no taller than 5 feet 11 inches (because of capsule size). Even with these criteria, the original field numbered over 400.

When the final seven candidates were announced, they had passed a battery of written, oral, medical and psychological tests the likes of which had never before been seen. Glenn was the lone Marine, joined by three each from the Navy and the Air Force.

Since the spacecraft was still being designed, each of the "Mercury Seven" had a specific area to follow and offer recommendations. Glenn was assigned to cockpit layout, instrumentation and controls for the spacecraft and the simulators.

One of the most memorable days in John Glenn's life was February 20, 1962. At 9:47 am, his spacecraft, *Friendship 7*, lifted off atop an Atlas rocket from Cape Canaveral, Florida. The primary objective of the mission was to prove that the NASA concept for orbital flights was sound, although Glenn did take control of the craft when in orbit to correct its tendency to yaw.

Those of us who remember the mission may also recall that there was an indication of a loose heat shield which could jeopardize a safe landing. A decision was made not to jettison the retrorocket pod during reentry. After the planned three orbits, it splashed down at 2:35 pm in the recovery area northeast of Puerto Rico.

Within minutes of spashdown, the destroyer *USS Noa* arrived alongside and hoisted the capsule aboard. A jubilant John Glenn emerged to enjoy his fourth sunset of the day.

In the weeks following, Glenn underwent rigorous debriefing and numerous meetings with NASA and elected officials, plus a parade in Washington, D.C. and addressing a Joint Session of Congress.

In January 1964, Glenn resigned from the astronaut program to enter the Ohio Democratic primary for U.S. senator, but withdrew after injuring his inner ear in a fall. Colonel Glenn retired from the Marine Corps in 1965 and entered private business, rising to the presidency of Royal Crown International.

After an unsuccessful campaign in 1970, Glenn was elected to the U.S. Senate from Ohio in 1974. He was reelected in 1980 and 1986. He serves on the Senate Foreign Relations and Democratic Policy Committees, and was the author of the Nuclear Non-proliferation Act of 1978. In both 1984 and 1988, he entered the presidential primaries but later withdrew because of lack of support.

Obituary

Joseph A. Hass

Charter member Joseph Anthony Hass, YAF 0258, died of lung cancer on May 15, 1988, at age 65. Joe was the original owner of the Wayne Hobby Center in Wayne, MI, and operated it until his retirement in 1985. Among other things, he made sure that there were RC model aircraft on display for YAF functions. He was also an instrument-rated pilot and a member of several model airplane clubs. A memorial service was held at the Willow Run hangar on May 21.

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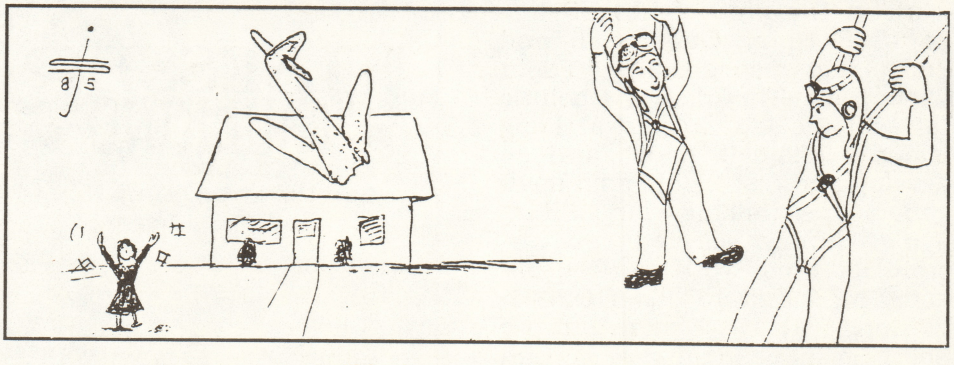

"Maybe we could just tell her we're the Right Stuff . . ."

NE Division Initiates Jimmy Doolittle Memorial Project

by Otto K. Mueller,
Northeast Division

A Jimmy Doolittle Memorial Committee has been authorized by the Northeast Board of Directors, consisting of Otto K. Mueller, Chairman, and committee members John Golderer, Museum Curator, and Oscar Nathans, Charter Member. The committee is being guided by Dr. Herbert O. Fisher, (YAF Airman of the Year in 1983), H. V. Pat Reilly, Executive Director of the Aviation Hall of Fame of New Jersey, Jack Elliott, Newspaper columnist and Editor of the *Newark Star-Ledger's* "Wings Over Jersey", Richard B. Foster, Former Vice President and General Manager of Aircraft Radio Corporation (ARC), David Wahlberg of the ARC, and Richard W. Seabury, III, whose grandfather founded the original Radio Frequency Labs.

James H. "Jimmy" Doolittle is probably the greatest living American to contribute the most to our country's civil and military aviation development. Doolittle is best known for leading a flight of land-based B-25 bombers from the deck of the Navy aircraft carrier *Hornet* to bomb Japan on April 18, 1942. While the raid did little physical damage to Japan, it had a great psychological impact on the American public. For his part as leader of the raid, Doolittle was promoted to Brigadier General, and he received the Medal of Honor.

One of the most significant of Doolittle's contributions to civil aviation was that of his pioneer work in the area of blind-flying. In 1928 Harry Gugenheim and Jerry Land opened the Full Flight Laboratory. They asked Doolittle to head the lab, located at Long Island's Mitchell Field, and to develop and test flight radio navigation instruments for "blind" flying. Jimmy selected two aircraft for this work: a Consolidated NY-2 and a Corsair O2U-1. Working with Dr. Elmer Ambrose Sperry, a directional gyro and an attitude gyro were installed as flight instruments. These instruments, when coupled with a radio directional signal broadcast from the airport, would allow a pilot to control his aircraft without seeing beyond the cockpit.

Many "blind" landings at night and in fog were made at both Mitchell Field and the ARC prior to the big test. This event took place on September 24, 1929. With Ben Kelsey as passenger and safety pilot, Doolittle took off from Mitchell Field, flew a fifteen-minute circuit and landed safely. He was under a lightproof hood that had been affixed to the rear cockpit of the NY-2 and he did not see the ground during the entire flight.

Much of this development work and flight testing was done by Doolittle at the Aircraft Radio Corporation (ARC) and at their airfield in Boonton Township, New Jersey. The success of the final blind flight is greatly due in part to the engineering genius and manufacturing skills of the ARC. Doolittle and his flying maneuvers are well-remembered by the old-timers of Boonton, and he has many friends there. It can be said that Doolittle made an impact on the Township of Boonton and that Boonton is fondly remembered by Jimmy. Today, Jimmy Doolittle is retired at 92 years of age, and lives in Carmel, California, with his wife, Jo.

A proposal for a memorial to Jimmy Doolittle was brought before the Boonton Township officials, and it was enthusiastically received. They immediately organized a Boonton Township Jimmy Doolittle Memorial Committee to work in conjunction with our Yankee Air Force Committee. To this date, a meeting of both committees has been held. The township has graciously offered a suitable site for the memorial, to be located at the edge of the old ARC airfield. Funding for the memorial will be sought through donations from individuals and businesses, and hopefully, grants. A memorial will be designed under the close cooperation of Pat Reilly. It must be noted here that Pat's help is invaluable and illustrates the close bonds between aviation people,

Editor's note: *The above article by Otto K. Mueller was extracted from the July/August issue of The Yankee Clipper, the divisional newsletter of the Northeast Division. YAF members who do not belong to the Northeast Division can subscribe to this informative 16-page monthly publication by becoming a "booster", for the modest amount of $12.00 annually. If interested, contact the editor, Ray Golowach, at the Northeast Division, Essex County Airport, 125 Passaic Avenue, Fairfield, NJ 07006.*

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MUSEUMOLOGY

At the April Board of Directors meeting, Director **Barbara Sutton** announced that **Bill Larry** has been appointed chairman of the Museum Display Staff.

U. S. Air Force Museum

During September and October the USAFM will display the Eugene Knight Aviation Art Collection. This group of 30 oil paintings of WWI fighter aircraft may be the most complete collection in existence. The paintings include 50 different aircraft types of the warring powers on the Western Front. Knight, a native of Dayton, spent two years researching and preparing the art.

Aircraft added to the USAFM collection this summer include a Boeing NKC-135A "Stratotanker" converted into an Airborne Laser Lab, which flew out of Kirtland AFB, NM. Also flown in was a Fairchild C-82A which had served in Alaska. A third aircraft, an English Bristol Beaufighter Mk 1.c, arrived by truck. The Museum's Convair F-106A "Delta Dart", s/n 56-451, will soon be leaving for Selfridge ANGB. Incidently, the Summer 1988 USAFM *Friends Bulletin* features a 13-page illustrated history of Selfridge Field.

RESTORATION NEWS

(Continued from Page 10)

"Parts is Parts"

B-17G: On October 23, 1943, a B-17F went in on a mountain ridge some forty miles from Dillon, Montana. Although the entire crew parachuted to safety, there was not much of the aircraft left to salvage and the government had the debris covered over. Earlier this year, some of the B-17 crew learned of the wreck and wondered if it might produce some usable parts for the *Yankee Lady* restoration. Soon a trip was planned by Lee Koepke, Norm Ellickson, Walt Hart, Bill Rodgers, Joe Slavik and John Snider.

On July 7, they flew to Salt Lake City and met two guides with pickup trucks. After a 500-mile drive, they arrived and set up camp one ridge over from the crash site. Anxious to see the wreckage, they had crossed the valley and were starting up the other side when they encountered two men, one of whom wore a "B-17" ball cap. As the two groups began to talk, mutual suspicion gave way to cooperation. The two were residents of Dillon who had been salvaging what they could from the wreck. They had gone to the trouble of cutting a path through the trees wide enough to pass a pickup and a backhoe. When they met the YAFers, they were relieved to learn that they were not Federal agents, since they had a truck full of B-17 parts and no permit for their removal. They even led our stalwarts up the mountain (after six rest stops) to the crash site.

The next day, our troops returned to the area, armed with tools and resolve to uncover treasures. The results of the day's efforts were several usable parts, including a bomb-bay door and a waist gun mount. As they prepared to leave the following day, a Forest Service agent arrived and informed them that they could not remove any parts until the site had been restored to its original condition. A quick estimate of the efforts needed to do this, including rental of a backhoe, forced a decision to abandon the project as well as the parts they'd recovered.

They later learned that the agent had made an incorrect interpretation by refusing to let them take the parts. In addition, the Dillon folks had previously removed some usable parts, including machine guns, bomb-bay doors and racks and the tail gun mount. Whether any of these parts will ever fly in *Yankee Lady* remains to be seen.

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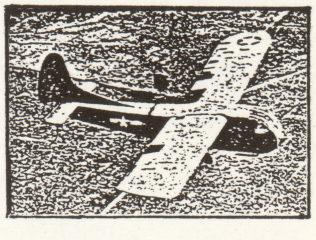

MEMBERSHIP REPORT

by Charlie Lingenfelter

The period between July 1 and August 10, 1988 has brought thirty new members into the Yankee Air Force. The total membership as of August 1, 1988, all divisions, is 1446.

Welcome aboard to the following new members: **Wisconsin/Illinois** – 3045 Joe Quint. **Northeast** – 3052 Karen Koehler, 3053 Kevin Barry and 3054 Leonard Verano Jr. **Willow Run** – 3036 F. Piccolo, 3037 Jamie H. Mandreger, 3038 Chester J. Sullivan Sr., 3039 Chester J. Sullivan Jr., 3040 Donald L. O'Neill, 3041 Thomas J. Koslosky, 3042 David W. Tarrant, 3043 Paul Wagner, 3044 Richard W. Dambrun, 3046 Robert G. Woods, 3047 Robert G. Logie, 3048 Gary Vanvilet, 3049 Richard Williamson, 3050 Hal D. Wright, 3051 John Raymond Becker, 3055 Joanna G. Steinman, 3056 Paul Halman, 3057 Dean O. DeLong, 3058 Matthew A. McNamara, 3059 Dennis K. Dulgerian, 3060 Janet Dulgerian, 3061 Paul Brock, 3062 Steve Barton, 3063 John Bayne, 3064 Jack W. Stead and 3065 Allen Wayne Heil.

In this issue of *Yankee Wings* is a YAF Membership Application Form. Use it to sign up a new member. Encourage another family member, friend, neighbor or co-worker to join and support the Yankee Air Force. It'll make you feel good!

BOARD REPORT

Board Votes To Seek Professional Director

The National Board of Directors signalled a major change of course at their July meeting by voting unanimously to employ a professional director for the YAF. The actual motion submitted by Director Joe Slavik reads, 'That this Board should employ an Executive Director, and that the President, without delay, appoint a five-man search and selection committee for that purpose."

Slavik prefaced his motion with comments regarding the need for such an action, and how the YAF could pay for it. He cited personal experiences with the Detroit Area Builders Association and St. Jude's Hospital in Memphis, both of which felt compelled to hire professional directors at a time when their budgets had no provisions for salaries. A professional director is, by definition, both a manager and a fundraiser. As such he would be charged with raising the funds necessary to meet the organization's budget (including his own salary), and with effectively managing all its resources in order to most effectively reach its goals. "Every organization that I have ever been connected with has started with determined and dedicated volunteers," Slavik said, "but at a certain stage in their development, they recognize the need for full-time, professional paid people if they are to continue to move forward." He suggested that, for the YAF, that time has arrived.

Director Fergus Mann added that he also had personal experiences in this area. As a young man he served as the first director of a college dental clinic, and continues to sit on the clinic's board. He said the hiring of a paid manager was a big decision in getting the enterprise started up and put onto a sound basis. Both Slavik and Mann offered to serve on the search committee. Other discussion indicated that there are several organizations available to provide contacts and assistance in the search for qualified candidates.

In other business, the Board discussed the possibility of the YAF accepting the sponsorship of an air show at Saginaw's Tri-City Airport in 1989, featuring the Blue Angels. This subject will be researched in greater detail, and was put on the agenda for August Board meeting.

Reports to the Board included the following list of candidates of the 1988 election:

President - Ralph Gilpin, Russ Maxwell and George Whitfield.

Vice President - Rosemary Goodes and Grant Martin.

Director *(five to be elected)* - Leroy Bassett, Dennis Brown, Frank Day, John Golderer, William Hanney, Thurza Kopka, Kay Miller, Joe Oberlee, Harry Terpstra, and Jim Uhley.

All general and lifetime members in good standing as of September 1, 1988, are eligible to vote. Ballots were mailed no later than September 15, and must be returned in time for counting on October 15. Election results will be announced first at the October 19 Board of Directors meeting.

Serious Budget Concerns

In the report of the Executive Committee, President Terpstra stated that actual revenues are lagging earlier projections by a significant amount. Net receipts for Memorial Day, for example, totalled approximately $15,000, or about $5,000 less than hoped for. As a result, committee chairmen are admonished to make greater efforts to curtail spending; and prior to making large expenditures, they are to check with Treasurer Kathy Dallape to ensure that funds are available, even when their approved budgets have not been spent. He also re-emphasized that bills will not be paid until a requisition is presented. It is also possible, he said, that additional budget cuts will be necessary in 1989.

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MEMBERSHIP APPLICATION FORM

MINIMUM AGE (18)

Please Print

Name _____ Home Phone ( ) _____

Mailing Address _____ Office Phone ( ) _____

_____ Date Of Birth _____
City State Zip

Occupation _____ Retired YES NO (please circle)

Employer _____

Introduced by _____ (Member name and number)
(Not required for membership)

Division - ☐ Willow Run ☐ Mid-Michigan ☐ North East ☐ Saginaw Valley ☐ Wisconsin/Illinois

Type of membership requested: (check one)

- ☐ **General - $45** ($35 dues, $10 initiation fee)
- ☐ **Associate - $35** ($25 dues, $10 initiation fee)
- ☐ **Lifetime** (one time dues $500)
- ☐ **Senior Lifetime** (60 Years or Older) (one time dues, $250)
- ☐ **Conditional Life Membership Available** (regular or senior)
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Total amount enclosed: $_____U.S. Funds only

I understand that my name, address and telephone numbers may be given to Yankee Air Force Members. (For Yankee Air Force Business only)

Applicant's Signature_____ Date_____

All Volunteer, Non-Profit Organization
All contributions are tax deductible as provided in U.S. tax law.
Please fill out other side of form.

REVISED JULY 1, 1988

Check the activities below which you are willing to participate in:

(Please number in order of preference)

- ☐ Aircraft Acquisition
- ☐ Aircraft Recovery / Restoration
- ☐ Flight Operations (Pilots / Mechanics)
- ☐ Finance / Gift Shop (Sales & Cashiers)
- ☐ Museum Tour Guides
- ☐ Museum Display / Development
- ☐ Hangar Restoration / Operation
- ☐ Publications
- ☐ Special Events
- ☐ Secretarial / Word Processing
- ☐ Administration
- ☐ Photography
- ☐ Programs (Membership Meeting)
- ☐ Public Relations / Publicity
- ☐ Accounting
- ☐ Membership Staff
- ☐ Fund Raising
- ☐ Security / Fire Prevention / Safety
- ☐ Library Staff
- ☐ Janitorial / Housekeeping
- ☐ Grounds Keeper
- ☐ Legal Advisor

Would you be willing to volunteer your services in areas other than indicated above? ☐ Yes ☐ No

Please list any special expertise you have or contacts which might be beneficial to the location, restoration, or flying of vintage aircraft; restoration and maintenance of buildings or hangars; administrative, legal, engineering, publicity, etc._____

_____

_____

_____

How did you first learn about the Yankee Air Force?_____

The following information is optional:

Are you a pilot?_____ Total Flying Hours_____

What types of aircraft have you flown ?_____

_____

Ratings_____

Are you a certified mechanic?_____ Rating_____

What aircraft, engine, or instrument types have you worked on?_____

_____

_____

_____

Comments or additional information you would like to submit: _____

_____

_____

ARMCHAIR AVIATOR

Stearman Fly-In; *29 min., HF0187, available in VHS from Handleman Filmworks, P.O. Box 166, Birmingham, MI 48012; $29.95 plus $3.00 Shipping/ handling (Michigan residents add 4% state sales tax)*

This video of the 15th annual Stearman Fly-In in 1986 was produced by YAF member and Stearman owner **Philip Handleman** (see Member News column elsewhere in this issue). The tape evokes strong memories of the days when thousands of fledgling pilots learned the basics of flying above the beautiful Midwestern countryside. The Stearman Fly-In is held annually in Galesburg, Illinois, on the second weekend of September. It provides an opportunity for Stearman owners and

buffs to congregate and enjoy comradeship and competitions such as flour bombing and aerobatics. It is seen through the eyes of the "Michigan Stearmans", who have attended this event for several years. Viewers should recognize YAFer **Bill Rodgers'** beautifully restored blue-and-yellow trainer. Also, the opening scenes were filmed at **Lou Spanberger's** New Hudson Airport.

The documentary includes interviews with Tom Lowe and Jim Leahy, the co-founders of the Stearman Restorers Association, and LGEN Bill Craigie, USAF, (Ret.), who was largely responsible for the Air Corps' decision to purchase Stearmans. The PT-13, which was the USAAC's designation, beat the Consolidated PT-11 in the USAAC's trainer competition, and over 9,600 examples were produced between 1936-42. In another sequence, YAFer **John Lewkowicz** and John Hooper discuss aerobatics in a Stearman. There are numerous scenes of aircraft in flight, accompanied by a majestic musical score. It is narrated by Walter J. Boyne, the former Director of the Smithsonian's National Air and Space Museum.

Plane Facts

1988-1989 USAFM GUEST LECTURE SCHEDULE

The U.S. Air Force Museum's 1988-1989 Guest Lecture series has been announced and is listed below. As in previous years, the lectures are open to the public and are free of charge. The lectures begin at 7:30 PM and the doors re-open at 6:30 PM. The gift shop is open before the lecture.

Tuesday, September 20th
"Flying the MiG 15"
MGEN Tom Collins, USAF (Ret)

Thursday, October 13th
"Flying the B-17" - Don Sachs
(This talk will be repeated on Saturday, October 15 - time TBA)

Thursday, November 17th
"Rolling Thunder – A View from the Cockpit (F-105)"
COL Jack Broughton, USAF (Ret)

Tuesday, January 17th
'Perspective on Soviet Aviation" - Dr. Marvin Strickler

Wednesday, February 15th
'Flying the Komet" -
Rudy Opitz

Thursday, March 16th
'Test Flying" - Tony LeVier

Tuesday, April 18th
"Women in the Military"
MGEN Jeanie Holm, USAF

MGEN Holm was the first USAF woman to be promoted to Brigadier General, and the first woman Major General in history. She is the author of *Women in the Military – An Unfinished Revolution.*

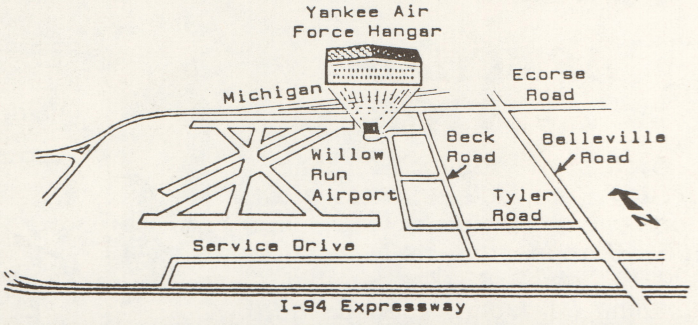
YAF People

Philip Handleman, whose aviation video, *Stearman Fly-In,* is reviewed in this issue, started his own company, Handleman Filmworks, about six years ago. He has produced numerous made-for-TV documentaries that have aired throughout Michigan. His most critically acclaimed work was *"Our Missing in Action",* which played on PBS-TV Channel 56 on Memorial Day weekend. He recently completed another aviation-related production, *"Action Air Show",* which describes the 1987 Willow Run Air Show and includes sequences on the YAF and President **Harry Terpstra.** Details on when it will be shown are pending.

As a trustee of the Detroit Science Center, Phil is largely responsible for the aviation and space speakers which have been sponsored this year by the Center. He is also an aviation writer and has had several articles published this year, including the August issues of *Private Pilot* and EAA's *Warbirds,* and the September issues of *The Antique Airplane Digest* and *Sport Aviation.* His first book, *Air Show USA,* is scheduled for release in October. This is a photographic record of the 1987 air show season and includes photos taken at the Willow Run show. Phil also is a pilot and the owner of a 1943 Boeing Stearman N2S-3 trainer. A tip of the YAF hat to Philip Handleman!

YAF HEADQUARTERS – WILLOW RUN AIRPORT

Take I-94 to Belleville Road exit, North to Tyler Road, west to Beck Road, turn right and enter through second gate on your left. Or take I-275 to exit 20 – Ecorse Road. Take Ecorse Road west to Beck, proceed south to first gate.



CALENDAR

OCTOBER 1988

5 – Headquarters Division General Membership (WR)
5 – Northeast Division Board – 7:00 (NE)
9 – B-17 Divisional work party (WR)
11 – Saginaw Valley Division Board (SV)
11 – Membership Staff (WR)
12 – B-17 Crew (WR)
12 – Mid-Michigan Division General Membership – 7:00 (MM)
13 – Wisconsin/Illinois Division General Membership (WI/IL)
18 – Saginaw Valley Division General Membership (SV)
19 – National Board of Governors (WR)
19 – Northeast Division General Membership – 7:00 (NE)
25 – Wisconsin/Illinois Division Board – 7:00 (WI/IL)
26 – Mid-Michigan Division Board (MM)
27 – Publications Staff (WR)

NOVEMBER 1988

2 – Headquarters Division General Membership (WR)
2 – Northeast Division Board – 7:00 (NE)
6 – B-17 Divisional work party (WR)
8 – Saginaw Valley Division Board (SV)
8 – Membership Staff (WR)
9 – B-17 Crew (WR)
9 – Mid-Michigan General Membership – 7:00 (MM)
10 – Wisconsin/Illinois Division General Membership (WI/IL)
15 – Saginaw Valley Division General Membership (SV)
16 – National Board of Governors (WR)
16 – Northeast Division General Membership (NE)
17 – Publications Staff (WR)
22 – Wisconsin/Illinois Division Board (WI/IL)
23 – Mid-Michigan Division Board (MM) (Check for possible rescheduling because of Thanksgiving.)

DECEMBER 1988

7 – Headquarters General Membership (WR)
7 – Northeast Division Board – 7:00 (NE)
10 – Security Committee – 10:00 (WR)
13 – Saginaw Valley Division Board (SV)
13 – Membership Staff (WR)
14 – B-17 Crew (WR)
14 – Mid-Michigan General Membership – 7:00 (MM)
20 – Saginaw Valley General Membership (SV)
21 – National Board of Governors (WR)
21 – Northeast Division General Membership – 7:00 (NE)
22 – Publications Staff (WR)
27 – Wisconsin/Illinois Division Board – 7:00 (WI/IL)
28 – Mid-Michigan Division Board (MM)

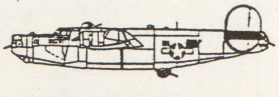
NOTES:

– All meetings begin at 7:30 PM, unless otherwise noted.

– An entry marked with an asterisk (*) indicates more information may be found elsewhere in this issue.

– Any additions or corrections to the calendar should be submitted to Stan Reich, Tel. (313) 427-8014.

Happy Thanksgiving!!!



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